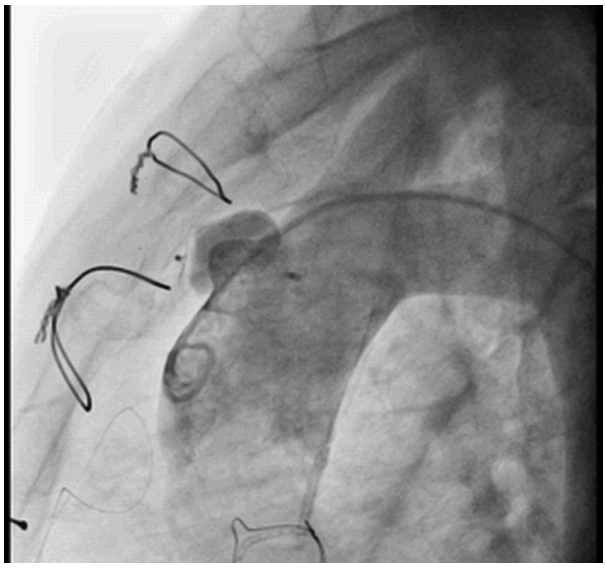

TCTAP C-227

A Case of TEVAR for Type B Aortic Dissection via Very Useful IVUS

Akimitsu Tanaka
Nagoya Tokusyukai General Hospital, Japan

[Clinical Information]
Patient initials or identifier number:
A.I.
Relevant clinical history and physical exam:
A man aged 61 visited a hospital because he had a sudden leg pain and lumbago. His left leg pulse was weak and pale.
Relevant test results prior to catheterization:
CT revealed type B aortic dissection and his lower limb arteries were not enhanced by contrast. In chemistries, the value of CPK was elevated. So he underwent F-F bypass to rescue his limb. The operation was finished safely. But his renal function was worsen remarkably because of malperfusion (Malperfusion is a ischemia of branch artery caused by dissection). Therefore he needed to undergo dialysis.
Finally, we decided to do TEVAR to close the entry of dissection.
Relevant catheterization findings:
The angiography showed that there was very large entry at the distal arch and very small reentry at the right common iliac artery. Besides, there were some reentry parts between them.
[Interventional Management]
Procedural step:
We inserted IVUS after crossing wire. Because of that we could understand the position of the wire and dissection lumen precisely, so we finished closing entry of dissection with TEVAR safely and certainly.
Case Summary:
It is essential to know the position of entry on TEVAR for aortic dissection.
On top of that, we need to know whether the wire was always in the true lumen or not, and whether some abdominal arteries (celiac artery, SMA, renal artery) branch from true lumen or false lumen. If we deployed stentgraft across the wall between true lumen and false lumen, it could be fatal. It is difficult to know where the wire is crossed only via using angiography. Then, it is very useful to use IVUS. Moreover, using IVUS can make contrast to confirm the position less. So it is particularly useful when we treat patients with renal failure caused by malperfusion.

TCTAP C-228

Successful Closure of Post-myocardial Infarction Ventricular Septal Defect with Transcatheter Occluder

Yu-Chen Wang, Ping-Han Lo
National Taiwan University Hospital, Taiwan

[Clinical Information]
Patient initials or identifier number:
L-J-Z
Relevant clinical history and physical exam:
The 69 y/o woman is a patient with history of HTN, hyperlipidemia, gastric ulcers, L't acoustic neuroma s/p OP with L't facial palsy, and ESRD s/p CAPD. In 2012/12, she was admitted due to NSTEMI and cardiogenic shock, and coronary angiography showed CAD, 2 vessel diseases status post DES stenting to RCA. However, echocardiography after PCI showed muscular type VSD with left to right shunt. After consulting cardiovascular surgeon, conservative treatment with close monitoring was suggested due to DES stenting and current dual-antiplatelet agents usage. 2 weeks later, she was discharged under relatively stable condition.
After discharge, echocardiography 3 months later showed persisteent muscular VSD with left to right shunt. However, this patient refused surgery and preferred minimal invasive treatment. Therefore, she was admitted for elective VSD occluder replacement
Physical examination:
Mental state: alert and well oriented; E4 M6 V5
Vital signs :BT: 35.7 °C, BP: 115/76 mmHg, PR 69/min, RR 18/min
HEENT: pink conjunctivae, anicteric sclera, *left eye blindness
Chest: symmetric expansion, no wheezing or crackle over bilateral lung field
Heart: regular heart beats, * a grade 3-4/6 systolic murmur over LLSB
Abdomen: normoactive bowel sound, no tenderness or rebounding pain
Extremities: warm extremities, no pitting edema
Pulsation: RA 2/2, FA 2/2, PA 2/2, DP 2/2, PT 2/2
Relevant test results prior to catheterization:
Echocardiography follow up 3 months later after PCI:
Depressed LV systolic function (EF 41%, WMSI=1.5)
Trace TR, MR
Persistent muscular VSD, left to right shunt
Relevant catheterization findings:
Hemodynamic:
PA=39/18. AO=86/52 mmHg. Qp/Qs=2.38
Coronary Angiography: - Dominant (R't)
- LM -Normal
- LAD -Diffuse atherosclerotic changes without significant lesion
- LCX -Normal
- RCA -Proximal and mid-RCA had atheroma, distal RCA had a patent stent
- Ramus -Nil
- Collateral-Nil
Others(Selective Angiography):
LV angiography: VSD near LV apex, left to right shunt
[Interventional Management]
Procedural step:

1. Under TEE guidance.
2. A 300cm Terumo wire was advanced through a 6F JR4 catheter, inserted via RFA into LV across the VSD into pulmonary artery.
3. The wire was snared out through RFV by a Goose Neck snare.
4. Size of the VSD was measured by a sizing balloon.
5. A 16mm Muscular VSD occluder was then deployed at the VSD by standard technique.
6. Persistent VT induced by the delivery catheter was terminated by 100J Cardioversion.

Valvular Heart Disease
(TCTAP C-229 to TCTAP C-235)

TCTAP C-229

Complete Recovery of Severely Impaired LV Function Post TAVI

Ali Almasood
Prince Sultan Cardiac Center, Saudi Arabia

[Clinical Information]
Patient initials or identifier number:
A.T.
Relevant clinical history and physical exam:
55 years old man, admitted to the hospital with progressive shortness of breathing over one year. Clinically he was in congestive heart failure, edematous, massive ascites and bilateral pleural effusion.
Relevant test results prior to catheterization:
Laboratory abnormal finding were very high PorBNP, and low sodium
Echocardiogram showed severely immured LV systolic function EF of 15%, verily degenerative Ao Valve, with gradient of 50mmHg (mean) and area of 0.6cm2.
Relevant catheterization findings:
Coronary angiogram are normal.
[Interventional Management]
Procedural step:
Sapien Edwards Valve size 26 was deployed successfully without complication and follow up 3 months echo showed complete recovery of LV function.